

Standard Test for Hardness in Water by ASTM D1126-12

Facility Name: _____ VELAP ID _____

Assessor Name: _____ Analyst Name: _____ Inspection Date _____

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
<i>Records Examined:</i> SOP Number/ Revision/ Date _____ Analyst: _____ Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____					
Were samples held for not longer than 6 months?	40 CFR 136 Table 1I				
Were samples not from highly colored waters for which the color change endpoint would be obscured?	6.2				
Was the concentration of the Na ₂ H ₂ EDTA Solution determined using the Calcium Standard Solution and the sample analysis procedure?	7.9				
Hardness					
Were sample pHs adjusted to between 7 and 10 prior to analysis?	9.1				
Was buffer solution then added to the samples?	9.1				
Were 2 drops of indicator or 2 drops of liquid added to the samples?	9.1				
Was Na ₂ H ₂ EDTA titrant added to the samples under constant stirring until color changed from red to blue?	9.1				
Was titration completed within minutes after the addition of buffer?	9.1				
If more than 20 mL Na ₂ H ₂ EDTA <i>per</i> 50 mL of sampe was needed, were samples diluted and reanalyzed?	9.1				
Calcium Hardness					
Was NaOH added to the sample aliquot followed by stirring?	9.3				
Was calcium indicator then added to the samples followed by stirring?	9.3				
Was Na ₂ H ₂ EDTA titrant added to the samples under constant stirring until color changed from red to royal blue	9.3				
If more than 15 mL Na ₂ H ₂ EDTA <i>per</i> 50 mL of sampe was needed, were samples diluted and reanalyzed?	9.3				
Quality Control					
Was a check standard analyzed at a minimum of 10% of samples to be between 80% and 120% recovery? (QC section introduced as recommendation)	12.2				
Was a laboratory control sample analyzed at a frequency of 10% of samples? (QC section introduced as recommendation)	12.3				
Notes/ Comments:					